

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF WISCONSIN

CIRCUIT CHECK INC.,

Plaintiff,

v.

Case No. 12-C-1211

QXQ INC.,

Defendant.

**DECISION AND ORDER GRANTING JUDGMENT
AS A MATTER OF LAW**

Defendant QxQ Inc. has moved for judgment as a matter of law, asking that this Court overturn the jury's verdict in favor of the Plaintiff, Circuit Check Inc. QxQ argues the jury got it wrong in finding Plaintiff's patent to be non-obvious. In the alternative, it asks for a new trial. For its part, Plaintiff has filed a post-judgment motion asking that the Court award enhanced damages and other relief due to the jury's finding that the infringement was willful. For the reasons given below, I conclude that QxQ's motion should be granted because the jury could not reasonably find the patents-in-suit to be non-obvious. The granting of that motion renders moot the Plaintiff's motion.

I. Background

The claimed invention in the case relates to a testing device for circuit boards. Circuit boards are relatively inexpensive but essential components of electronic devices and appliances. If a circuit board is defective, the device or appliance in which it is installed will not work and the product is worthless. Thus, it is essential for manufacturers of circuit boards to test them before

they are sold to manufacturers of electronic appliances and devices. Circuit board testers are large, expensive and complex machines consisting of a computer with an interface that connects to a test fixture. Test fixtures are used to connect the circuit board being tested to the probes on the tester. Many test fixtures use an interface plate (also called an alignment plate or waffle plate), which is essentially a flat piece of plastic with rows of holes through which the probes that contact the board protrude.

The general nature of the patented technology at issue was set forth in this Court's April 1, 2014 Decision and Order denying QxQ's motion for summary judgment. (ECF No. 81.) In short, the Plaintiff's invention is a means of marking the interface plates for the circuit board test fixtures. According to the patent, the invention is a "plate with an indicator for discerning among pre-identified probe holes in the plate." (ECF No. 18-1 at 5.)

The essence of the Plaintiff's invention is not complex; in fact, by its own admission it is a "simple and elegant solution" to a pre-existing problem in the industry. (ECF No. 118 at 8.) As Circuit Check explained to the jury, that problem involved marking the interface plates for circuit board test fixtures in a way that would not require someone to manually mark the plates at numerous locations, a process that was labor-intensive, subject to human error, and expensive. The method disclosed involves covering the surface of an interface plate with a colorant, i.e., paint, that contrasts with the plate's color and then removing that colorant in the selected areas around the holes in the plate through which the probes are intended to protrude. (ECF No. 18-1 at col. 7-8.) *Removing* the colorant in areas from which probes protrude makes it easier to verify that the probes are properly aligned because the underlying material will show through in contrast to the colorant that remains. In other words, the interface plate is marked by scratching off a surface coat of paint at

predetermined locations so that the contrasting color of the plate itself is visible.

II. Analysis

A. Standards

Judgment as a matter of law (JMOL) is appropriate when “there is no legally sufficient evidentiary basis for a reasonable jury to find for that party on that issue.” Fed.R.Civ.P. 50(a)(1).

Verizon Services Corp. v. Cox Fibernet Virginia, Inc., 602 F.3d 1325, 1331 (Fed. Cir. 2010). The standard for JMOL allows a court to overturn a jury’s finding only if no rational jury could have come to the same conclusion. *E.E.O.C. v. AutoZone, Inc.*, 707 F.3d 824, 834–35 (7th Cir.2013). In the alternative, QxQ asks for a new trial, pursuant to Fed. R. Civ. P. 59(a). A new trial is appropriate if the jury’s verdict is against the manifest weight of the evidence or if the trial was in some way unfair to the moving party. *Willis v. Lepine*, 687 F.3d 826, 836 (7th Cir. 2012).

B. *Prima Facie* Case

A patent is invalid as obvious “if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” 35 U.S.C. § 103(a). Obviousness is a question of law informed by a number of underlying factual inquiries: (1) the scope and content of the prior art; (2) the differences between the prior art and the claims at issue; (3) the level of ordinary skill in the field of the invention; and (4) objective considerations such as commercial success, long felt but unsolved need, and the failure of others. *Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 17–18 (1966); *see also KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 406 (2007). “Even when all claim limitations are found in prior art references, the fact-finder must determine what the prior art teaches, whether prior art teaches away

from the claimed invention, and whether there was motivation to combine teachings from separate references.” *Cheese Systems, Inc. v. Tetra Pak Cheese and Powder Systems, Inc.*, 725 F.3d 1341, 1352 (Fed. Cir. 2013).

In denying QxQ’s motion for summary judgment, I did not explicitly conclude that QxQ had made out a *prima facie* case of obviousness, but that was arguably an implicit finding, given that the decision was based primarily on Circuit Check’s evidence of secondary factors, such as industry praise and commercial success. Specifically, I concluded that “although the technology does not appear complex and although it has some of the ostensible hallmarks of obviousness, the marketplace says otherwise. Or at least a jury could so find.” (ECF No. 81 at 9.) Thus, my conclusion that Circuit Check should be able to survive summary judgment was based not on its evidence regarding the *prima facie* case but on the so-called secondary factors, which I concluded could render non-obvious an invention that ostensibly appeared to be obvious. I now make explicit my conclusion that QxQ has made out a *prima facie* case of obviousness.

In arguing for obviousness, QxQ cited several examples of “prior art,” although the term is used loosely. For example, it noted that primitive pictures (petroglyphs) were made by our ancestors by using rudimentary chisels to remove the dark “desert varnish” that coated large stones, revealing a lighter color underneath. The lighter chiseled area thus stood out against the darker surface to delineate the picture. In addition, QxQ pointed out a dye known as Prussian blue, which is also known as machinist’s blue or marking blue. The dye is commonly used in metalworking to stain a metal object, after which the surface coating can be scratched off with a sharp instrument to reveal markings that contrast with the blue stain. In fact, the named inventor testified that he was very familiar with Prussian blue:

We used material like this when I was in junior high school in shop class to mark metal to try to -- What it is, it's like a dye. You take an aluminum block or piece of metal and you put this Prussian blue or dye over the top. It puts a removable paint on that material, and you can scribe--scribe or touch off with a drill and find the top of the surface of the aluminum. We drew shapes in there in middle school and used this material. And after you're done milling away the material to this line that you put with Prussian blue, then you wash that material off and move on.

(ECF No. 107 at 82-83.)

The point in both of these (and countless other) manifestations is that when a surface coating has a different color than the underlying object, the selective removal of that coating will reveal a contrasting color, thus providing a way to mark or depict something on an object by *removing* material rather than adding it by, for example, painting. In fact, any vandal who has “keyed” a car knows that stripping the paint with a key will result in the underlying metal color showing through. It is a way of marking something by removing a surface coating having a different color from the underlying thing.

Circuit Check does not deny that the general principle of marking by removal had long existed. Nor does it claim that it invented interface or alignment plates used in circuit board test fixtures. These had also been known in the prior art. Instead, it argues that it is the idea of combining the two concepts that was original.

I begin by noting the Supreme Court’s observation that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR*, 550 U.S. at 416 (2007). That a claim is obvious is also clear when it involves no more than “the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for the improvement.” *Id.* at 417. The *KSR* court also found that the factors set forth in *Graham* are not to be rigidly or mechanically

applied: *Graham* did not “disturb[] this Court's earlier instructions concerning the need for caution in granting a patent based on the combination of elements found in the prior art.” *Id.* at 415. “As our precedents make clear . . . the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *Id.* at 418.

Circuit Check has argued the case without reference to these flexible standards, instead preferring the more comfortable and structured framework of *Graham*. For example, it argues that the pre-existing technology cited by QxQ does not qualify as “prior art,” because things like ancient rock drawings were not within the field of circuit board testers. It further argues that QxQ provided no expert testimony as evidence about the knowledge one skilled in the art would possess. But QxQ’s argument is more basic than that. The Defendant’s obviousness argument is not premised on citing specific examples of prior art in the applicable field, nor does it rely on nuanced discussion about the level of ordinary skill in that particular field. Instead, its argument is founded on what might be called a more “common sense” and generalized belief that it would have been apparent to almost *anyone* that coating an alignment plate and then removing the coating would have been a useful and viable method of marking that plate. In QxQ’s view, Circuit Check’s invention involves no more than the “application of a known technique to a piece of prior art ready for the improvement.” *KSR*, 550 U.S. at 418.

QxQ’s appeal to common sense is not out of place. As the Federal Circuit has noted, the obviousness inquiry “not only permits, but requires, consideration of common knowledge and common sense.” *DyStar Textilfarben GmbH & Co. v. C.H. Patrick Co.*, 464 F.3d 1356, 1367 (Fed. Cir. 2006); see *KSR*, 550 U.S. at 421 (eschewing “[r]igid preventative rules that deny factfinders

recourse to common sense”); *Perfect Web Techs., Inc. v. Info USA, Inc.*, 587 F.3d 1324, 1329 (Fed. Cir. 2009) (the obviousness analysis “may include recourse to logic, judgment, and common sense available to the person of ordinary skill that do not necessarily require explication in any reference or expert opinion”).

Thus, expert testimony is not always required on the question of obviousness if the matters are within the understanding of the ordinary layperson. *Cf. Proveris Scientific Corp. v. Innovasystems, Inc.*, 536 F.3d 1256, 1267 (Fed. Cir. 2008) (“the ’400 patent teaches a device used for calibrating drug delivery devices; this subject matter is sufficiently complex to fall beyond the grasp of an ordinary layperson. We thus are not prepared to say the district court abused its discretion in requiring Innova to present expert testimony in order to establish invalidity.”) In fact, in *KSR* the Supreme Court made its own obviousness conclusion without apparent reference to expert testimony: “The prior art discussed above leads us to the conclusion that attaching the sensor where both *KSR* and *Engelgau* put it would have been obvious to a person of ordinary skill.” *KSR*, 550 U.S. at 425. In addition, that court noted the following:

Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. . . . As our precedents make clear, however, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.

Id. at 418.

Thus, the Supreme Court made clear that although it would “often” be necessary to assess “the background knowledge possessed by a person having ordinary skill in the art,” it was not

required in every case. *Id.* This is exactly the kind of case in which expert testimony is not required. Here, QxQ is not making claims about what only someone with ordinary skill in the field of circuit board testers would know (which would likely require expert testimony); it is instead suggesting that anyone with little or no technical background would have recognized what the patents at issue here disclose.

Because this is a “common sense” kind of case, Circuit Check’s arguments fall flat. No doubt it is true that primitive rock carvings are not technically pertinent to the “field” of circuit testers, and that one skilled in the art would probably not have thought about such carvings when designing an alignment plate. Similarly, witnesses credibly testified that Prussian blue dye had not been used on alignment plates. But that misses the point. QxQ’s argument is not that the method used in rock carvings is “prior art” to this particular invention, but that the method is so universal and obvious and ancient that it was known even by cavemen, and thus any layman using common sense would understand that an alignment plate could be marked using that method. In short, the ability to mark something by coating it and then removing some material was part of the toolbox not just of those skilled in the art of circuit board testing but of pretty much anyone who would ever have occasion to design an industrial product.

It is true that “the mere recitation of the words ‘common sense’ without any support adds nothing to the obviousness equation. Thus, we have required that obviousness findings grounded in ‘common sense’ must contain explicit and clear reasoning providing some rational underpinning why common sense compels a finding of obviousness.” *Plantronics, Inc. v. Aliph, Inc.*, 724 F.3d 1343, 1354 (Fed. Cir. 2013) (internal citations omitted). Here, the rational underpinning is this: because the method of marking was obvious and the need to mark alignment plates was equally

clear, someone of ordinary skill designing an alignment plate would know that the disclosed method would be a viable option. Put another way, there are two obvious ways to mark something: to add material (e.g., paint), or to remove material, particularly after adding a coating with a contrasting color. Someone with ordinary skill would be able to pick from either of these obvious methods of marking an alignment plate, and the use of the marking-by-removal method does not lead to any unexpected results.

Circuit Check protests that the prior art taught away from using the marking-by-removal method. “A reference may be said to teach away when a person of ordinary skill . . . would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant.” *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1327 (Fed. Cir. 2009). I rejected this argument at the summary judgment stage, finding that Circuit Check merely showed that the industry had typically used drilled circles or paint to mark pins on alignment plates. It is not enough to show that others did things differently because that is *presumed* by the very granting of a patent — a patent must be novel. Nothing in the prior art taught, or even suggested, that adding a coating to an alignment plate and then selectively removing it would be unadvisable.

At trial, some witnesses testified that they did not want paint on their alignment plates because it could chip off and damage the tester. This demonstrates that some in the industry did not want a painted coating on their alignment plate. But that does not mean the prior art taught away from the use of coatings; it simply means that some in the industry harbored a view that painting the surface compromises the alignment plate and / or the testing process, a view that some continue to hold today. The testimony of the inventor, Scott Staggart, is instructive. He described how his

initial trials with the invention were unsuccessful because the paint would chip or flake off in response to the drilling. It only began to work once he and a “paint person” found a paint partly made of epoxy that would bond to the plastic alignment plate after it was baked on. (ECF No. 107 at 68.)

What Staggart’s testimony (and others’) shows is not that prior art taught away from using any kind of coating on an alignment plate; it shows only that using *unbonded* paint—paint that would chip away—was unadvisable.

Q Is that important to your invention to have the paint bond to the plate?

A Absolutely. You do not want that flaking off later and wrecking a half a million dollar tester.

(ECF No. 107 at 68.)

The important distinction in *United States v. Adams* was the fact that the invention was successful despite two known hurdles to its success: “Despite the fact that each of the elements of the Adams battery was well known in the prior art, to combine them as did Adams required that a person reasonably skilled in the prior art must ignore that (1) batteries which continued to operate on an open circuit and which heated in normal use were not practical; and (2) water-activated batteries were successful only when combined with electrolytes detrimental to the use of magnesium. These long-accepted factors, when taken together, would, we believe, deter any investigation into such a combination as is used by Adams.” 383 U.S. 39, 51-52 (1966). Importantly, these were qualities that were inherent in the batteries themselves, and they would have caused someone skilled in the art to harbor skepticism about combining the elements. Here, there is nothing *inherently* unadvisable about using a contrasting-colored coating; instead, the problems

Circuit Check identified were practical (rather than categorical) ones, as demonstrated by the fact that they were overcome in large part by talking to a “paint person” to discover the right kind of paint. In short, as discussed more fully below, Circuit Check’s argument exposes a disconnect between its non-obviousness argument and what the patent actually discloses. If Staggart had invented a kind of paint that adhered well with plastic surfaces, Circuit Check’s arguments would be more on-point. But here the claims are much more general, and merely disclose the idea (without mentioning paint at all) of selectively removing a colorant to mark alignment plates. Simply put, there is nothing in the prior art that teaches away from that process.

This point is made clear in *Adams*, and in other cases, where the factors that “taught away” from the combination were not just inherent to the battery but also to the patented claims themselves. *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1326 (Fed. Cir. 2009) (“An inference of nonobviousness is especially strong where the prior art’s teachings undermine the very reason being proffered as to why a person of ordinary skill would have combined the known elements.”). Here, by contrast, the use of a given type of paint is not even mentioned in the claims, nor in the prior art. Instead, the patent itself merely discloses “indicia” or “colorant” of a different color being “removed from areas of said plate adjacent each of said predetermined holes.” (ECF No. 18-1 at 6:47-49.) Thus, even if prior art taught away from the use of paint, Plaintiff points to nothing in the prior art that would teach away from use of “colorant,” which is the idea disclosed in the claims themselves.

In addition, there was a strong motivation to combine the use of colored coating with an alignment plate. As the inventor Staggert explained, a computer-run drilling machine could easily and quickly mark plates, but the markings were inferior because they could only be seen in good

lighting.

A It's a machine controlled driller. It's not like a hand drill with your hand. It's actually—it sits on a flatbed and has a gantry with a drill head that moves in X and Y direction and very precision drill locations in certain spots.

Q And what's the advantage of using an automatic drill?

A Once you write a program and load it into a CNC [computer numerical control] and you zero the plate to the drill . . . it's really fast. It goes super fast and you don't have any errors. It's done right to the numbers.

Q Is it—Now, the plate that's been drilled, is it easy—is it easy or hard to see?

A The drill only [without contrast] is very hard to see. It's not very effective. It's not preferred at all for marking. You have to be in very good lighting. You have to turn at different angles to be able to see which one is going through there . . .

(ECF No. 107 at 59.)

Thus, it was clear that marking alignment plates with a CNC drill would be an advantage, if only the markings could be seen better. The well-known process of applying a coating of a contrasting color to the entire surface and then removing it in the desired places therefore provided a simple solution to that problem, and thus the combination of the two elements would have been obvious. In sum, I am satisfied that QxQ has made out a strong *prima facie* case of obviousness. As discussed above, I reach this conclusion not by finding facts differently than the jury but by application of the legal principles of obviousness to facts that were largely undisputed.

C. Objective Factors

As noted earlier, this case was more about secondary factors rather than the *prima facie* case itself. These factors are intended to restrict the prejudice of hindsight bias, which often overlooks that “[t]he genius of invention is often a combination of known elements which in hindsight seems preordained.” *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351 (Fed. Cir. 2001). The

secondary factors typically include commercial success and industry praise, copying, addressing a long-felt need, and unexpected results. *In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir. 1998) (collecting cases). It could be argued that consideration of secondary factors is not always required. They are utilized “to give light to the circumstances surrounding the origin of the subject matter sought to be patented” where the determination of obviousness is not otherwise clear. *KSR*, 550 U.S. at 406 (quoting *Graham*, 383 U.S. at 17-18). As *KSR* explained, “*Graham* set forth a broad inquiry and invited courts, *where appropriate*, to look at any secondary considerations that would prove instructive.” *Id.* at 415 (citing *Graham*, 383 U.S. at 17) (italics added). This implies that in some cases secondary considerations need not be considered at all. But the Federal Circuit has made clear that “all evidence pertaining to the objective indicia of nonobviousness must be considered before reaching an obviousness conclusion.” *Plantronics, Inc. v. Aliph, Inc.*, 724 F.3d 1343, 1355 (Fed. Cir. 2013); *Apple Inc. v. International Trade Com'n*, 725 F.3d 1356, 1365 (Fed. Cir. 2013) (“We have repeatedly held that evidence relating to all four *Graham* factors—including objective evidence of secondary considerations—must be considered before determining whether the claimed invention would have been obvious to one of skill in the art at the time of invention.”) Here, based solely on the *prima facie* case, I would find the invention obvious. But even if the secondary factors are considered, the result does not change.

1. Long-felt, Unmet Demand

Circuit Check first argues that there was a demand for the invention and that others tried (but failed) to meet that demand. Following the 1989 introduction of the Agilent 3070 circuit board tester, Circuit Check argues that the industry tried repeatedly to find better ways of marking alignment plates. These methods included using “white out” to mark pin locations, painting the pin

locations, or using a mechanical drill to remove the area around the proper pins. According to the ‘796 patent itself, manually marking holes was labor-intensive and very expensive. (ECF No. 18-1 at 2:65-67.) Circuit Check argues that the industry failed for more than 10 years to come up with a solution that created easily visible markings that were efficient to make.

But Circuit Check’s argument is just that: argument. There was little actual evidence that the industry was struggling to solve the kind of problem that was crying out for a solution. It is true that the industry used other marking methods during that time period, but that does not mean companies were demanding a solution to any kind of marking problem. Circuit Check’s evidence that the other methods are inferior is largely based on the inventor’s own testimony. He was able to explain what motivated *him* to invent the method (for example, in his experience, painting the marks was laborious), but that does not necessarily mean that others in the industry viewed the other methods so dimly. In fact, the evidence was to the contrary. Others in the industry do not use Circuit Check’s patented method and continue to use the other marking methods or none at all, and there was no evidence that they have attempted to license Circuit Check’s technology. *In re GPAC Inc.*, 57 F.3d 1573, 1580 (Fed. Cir. 1995) (“Licenses taken under the patent in suit may constitute evidence of nonobviousness). Similarly, many customers continue to use testers marked in the traditional ways without apparent problem, and QxQ notes that its own sales have not been hurt since it stopped using the patented method. This suggests that even now, the invention is not addressing a long-felt need. In fact, given how simple the solution was, the fact that it took more than a decade to arrive at a solution speaks volumes about how limited the problem may have been in the first place.

2. Industry Skepticism

Circuit Check also argues that people in the test fixture industry were skeptical of the invention, which supports a non-obviousness finding. This argument echoes its argument that the prior art taught away from painting alignment plates. As noted earlier, however, although there were certainly some in the industry who did not want paint at all on their alignment plates, there was no evidence that a paint that did not flake or chip off would have aroused significant industry skepticism. Here, any skepticism was generated solely from a mistaken belief that *any* paint would necessarily chip off and possibly damage an expensive tester. But the skepticism cited came not from experts in paint or coating—which is the nub of the innovation here—but from those in the testing industry. When discussing industry skepticism as an objective factor of nonobviousness, the Federal Circuit almost uniformly phrases it as “skepticism of skilled artisans.” *Power Integrations, Inc. v. Fairchild Semiconductor Intern., Inc.*, 711 F.3d 1348, 1368 (Fed. Cir. 2013). This suggests that it is not enough to show that some within a given industry were skeptical; it must be shown that those *with relevant knowledge and experience* were skeptical as well. For example, in *In re Rosuvastatin Calcium Patent Litigation*, “Plaintiffs pointed out that at least five pharmaceutical companies had abandoned their research on statins with pyrimidine cores.” 703 F.3d 511, 517 (Fed. Cir. 2012). There, no fewer than five companies with pharmaceutical expertise tried, but abandoned, a kind of statin drug based on expert skepticism that the research would be fruitful. And in *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, inventors of a new device for healing wounds faced skepticism not from laymen but from emergency room physicians and fellow doctors—experts who dealt with wounds for a living—and at one point they even had trouble publishing their findings in peer-reviewed journals because the medical profession was so skeptical.

688 F.3d 1342, 1367 (Fed. Cir. 2012). What these and other cases show is that if people having relevant knowledge and experience are skeptical of an invention, the invention could indeed be non-obvious. But here the innovation was in finding a paint that adheres well to the plastic alignment plate, and the only evidence of industry skepticism comes from a few individuals who were not “skilled artisans” in the field of coating or painting. That is, there was little evidence that people had tried and failed to build alignment plates using painted surfaces, nor that anyone had expertise in developing paint that would adhere to a plastic surface. As the inventor himself testified, he achieved good results only after talking to a “paint person,” and there is no evidence that “paint people” viewed the invention skeptically. In short, it would not make sense to find an invention non-obvious based on the skepticism of people who were not skilled artisans in the relevant field.

3. Unexpected Results

Circuit Check also argues that it achieved unexpected results. “To be particularly probative, evidence of unexpected results must establish that there is a difference between the results obtained and those of the closest prior art, and that the difference would not have been expected by one of ordinary skill in the art at the time of the invention.” *Bristol-Myers Squibb Co. v. Teva Pharmaceuticals USA, Inc.*, 752 F.3d 967, 977 (Fed. Cir. 2014). Here, Circuit Check argues that the successful result was unexpected because the industry had long avoided using much paint on interface plates. As the Plaintiff neatly summarizes it: “After extensive testing, however, Circuit Check found a bonded paint that made the invention operate successfully with far more paint.” (ECF No. 118 at 30.)

Once again, the argument is misplaced because Circuit Check’s patented invention is *not* the use of adhering paint, or even the use of paint in general. Instead, the patent itself merely

discloses “indicia” or “colorant” of a different color being “removed from areas of said plate adjacent each of said predetermined holes.” (ECF No. 18-1 at 6:47-49.) There was no evidence that selectively removing colorant from an alignment plate led to any unexpected results.

Although the patent briefly discusses paint, the inventors make that disclosure in the specification in the context of a preferred embodiment, rather than in any of the claims themselves:

In the case where a drilling machine will remove the paint, which is the preferred solution, we have found that it is important to match the paint with the base material very carefully. In initial attempts, we found that the drill would not only scrape a circular hole, but also cause the paint to chip and remove paint from adjacent holes. Vibration might also cause the paint to flake. The preferred base material is a hard plastic, so a paint which adheres well (such as that mentioned above) should be chosen and tested. Thus in our preferred solution, the indicator, or paint applied to the base plate should fixedly adhere thereto, so that when being drilled, scraped or otherwise removed to as the hole marker.

(ECF No. 18-1 at 5:13-24.)

Thus, the patent instructs that, in the preferred embodiment, it is important to find a paint that adheres well: “[A] paint which adheres well . . . should be chosen and tested.” It is hard to imagine a recommendation more obvious than that. If there is any surprising result here, it is simply that “Mr. Staggert found a paint that bonded with the plastic of the interface plate.” (ECF No. 118 at 30.) But because the Plaintiff does not have a patent on “choosing a paint,” Plaintiff’s argument is off the mark. For “unexpected results” to be a meaningful gauge of obviousness, we would need evidence that the patented invention itself led to such results, not that the discovery of a pre-existing product, used in a single embodiment, was unexpected. “Where the offered secondary consideration actually results from something other than what is both claimed and novel in the claim, there is no nexus to the merits of the claimed invention.” *In re Huai-Hung Kao*, 639 F.3d 1057, 1068 (Fed. Cir. 2011).

In sum, the Plaintiff's argument is premised on the idea that finding the right paint was an unexpected development, but because paint selection is not part of the patented idea, it cannot argue that its patented invention produced unexpected results. The claims speak in much more general terms and only vaguely address the kind of paint to be used ("the coating 15 may be a paint, a two-part epoxy, or an other opaque coating . . .) (ECF No. 18-1 at 5:1-2.) And to the extent the preferred embodiment discusses paint at all, the specification does not actually disclose anything except for the obvious statement that "a paint which adheres well . . . should be chosen and tested." (ECF No. 18-1 at 5:20-21.) Remarkably, this disclosure begs the very question that Plaintiff believes is so novel and non-obvious. On the one hand, Plaintiff is touting its invention as innovative because it required extensive testing to discover the proper paint to use, but on the other hand the patent itself teaches that the *user* should select and *test* a paint that "adheres well" — the very thing Plaintiff now claims is innovative. This means that the essence of the alleged ingenuity of the paint discovery is not even disclosed in the patent. Thus, although the result of finding the right paint might have been subjectively unexpected to Staggart himself, it has nothing to do with the actual patented material, which side-steps the entire issue of paint by telling users to select a paint that sticks.

4. Commercial Success

Circuit Check also argues that evidence of the invention's commercial success undercuts any obviousness argument. Circuit Check's Adams testified that once customers got past their initial skepticism, they adopted the technology and didn't want to go back. "It's like the difference between color TV and high definition. Once you get a taste of it, you don't want to go back." (ECF No. 107 at 105.) Adams' testimony seemed largely limited to Plexus, a large customer, however,

and QxQ notes that Circuit Check’s evidence was based on its own employee’s impressions of the product rather than any customers themselves. Moreover, QxQ provided evidence that some customers continued to prefer an absence of paint on the alignment plates. (ECF No. 109 at 65.) It also enjoyed solid sales even after it stopped using the claimed invention in 2012.

The evidence linking commercial success to the patented invention, rather than other factors, was not particularly strong. As QxQ points out, there are many variables in the products, and Circuit Check’s brochures never touted its invention as something particularly desirable or a “must have” feature. Moreover, much of the consumer demand for the product came from a single customer, Plexus, while other potential customers continued to prefer other kinds of alignment plates. Even so, I am satisfied that the jury could have credited evidence that QxQ’s sales of infringing products rose while its sales of non-infringing products fell. It could also make the logical leap to find a nexus between the sales and the patented technology. *Ormco Corp. v. Align Tech., Inc.*, 463 F.3d 1299, 1311–12 (Fed. Cir. 2006) (“Evidence of commercial success, or other secondary considerations, is only significant if there is a nexus between the claimed invention and the commercial success.”) But because the evidence on this score was limited, a reasonable jury would not have been able to find the invention non-obvious based on this factor alone, particularly given the strong *prima facie* case. *KSR*, 550 U.S. at 413 (upholding district court’s summary judgment of invalidity for obviousness despite evidence of commercial success). Accordingly, this factor tilts only slightly in favor of Circuit Check.

5. Copying

Finally, Circuit Check alleges that QxQ copied its idea. As with commercial success, the fact that the idea may have been immediately adopted by a competitor suggests that it was not as

obvious as it might otherwise appear. According to Circuit Check, Plexus (a customer of both QxQ and Circuit Check) was very happy with Circuit Check’s new way of marking alignment plates, and eventually Plexus asked QxQ to mark its plates in the same fashion. QxQ notes that much of this is based on the “speculation” of Circuit Check’s president, who testified that he had an “intuition” as to what might have happened but conceded he had no proof. (ECF No. 108 at 186-188.) Moreover, its own employee testified that she and her husband independently came up with the idea on their own.

Circuit Check argues that given the jury verdict in its favor, we must assume the jury credited its speculative evidence of copying. That is not true. “Our case law holds that copying requires evidence of efforts to replicate a specific product, which may be demonstrated through internal company documents, direct evidence such as disassembling a patented prototype, photographing its features, and using the photograph as a blueprint to build a replica, or access to the patented product combined with substantial similarity to the patented product.” *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1246 (Fed.Cir. 2010). Speculation that a competitor copies one’s product is not enough to show copying, particularly here, where there was credible testimony from QxQ employees explaining how they arrived at the same solution independently.

Even if copying occurred, the copying evidence would not be particularly persuasive on the question of obviousness. First, most of the evidence related to orders for a single customer, Plexus. Plaintiff’s own version of events has QxQ responding to the wishes of one customer, rather than independently concluding that the marketplace as a whole demanded such a feature. In other words, at most the evidence shows that Plexus, or a very limited number of customers, viewed the invention as worthwhile. Given the limited scope and purpose of the alleged copying, it is not the

kind of objective evidence that is strongly suggestive of non-obviousness. Additionally, it is not clear what exactly Circuit Check believes QxQ copied. To the extent the invention's originality lies in the selection of the proper paint, which was explained at length to the jury, Circuit Check never explained how QxQ would have been able to copy Circuit Check's paint selection on its own. And of course, as noted throughout, the selection of paint is not actually part of the patented invention. Thus, it is certainly conceivable that the jury found copying of something that is not actually patented, and its conclusion on that score therefore would be irrelevant. In any event, even taking the facts in the light most favorable to the verdict, the evidence of copying only mildly supports the claim of non-obviousness. Like the evidence of commercial success, its impact is quite limited. *Ecolochem, Inc. v. Southern California Edison Co.*, 227 F.3d 1361, 1380 (Fed. Cir. 2000) ("a showing of copying is only equivocal evidence of non-obviousness in the absence of more compelling objective indicia of other secondary considerations.")

6. Weighing the Factors

As noted at the outset, this case survived the Defendant's motion for summary judgment because Circuit Check promised that it would come forward with substantial evidence of secondary factors that would show that what appeared to be an obvious combination of two well-known practices was actually not obvious at all. As set forth above, however, the *prima facie* case for obviousness here is so strong that consideration of secondary factors is arguably not even required. Even if every reasonable inference from the evidence is drawn in favor of Circuit Check, and keeping in mind that the burden is on the challenger, there is still not enough to establish that the invention is anything but obvious. "[W]here a claimed invention represents no more than the predictable use of prior art elements according to established functions, as here, evidence of

secondary indicia are frequently deemed inadequate to establish non-obviousness.” *Ohio Willow Wood Co. v. Alps South, LLC*, 735 F.3d 1333, 1344 (Fed. Cir. 2013) (citing *Western Union Co. v. MoneyGram Payment Sys., Inc.*, 626 F.3d 1361, 1373 (Fed. Cir. 2010) (“weak secondary considerations generally do not overcome a strong *prima facie* case of obviousness”)).

7. Claims 5 and 11 of the ‘796 Patent

Circuit Check also argues that the motion must be denied because QxQ never introduced any evidence regarding claims 5 and 11 of the ‘796 patent. Because QxQ conceded that it infringed these claims, it was required to put forth some evidence of invalidity as to those claims as well.

Claim 5 is dependent on claim 1 and adds the following limitation: “[t]he plate of claim 1, wherein the predetermined first and second indicia are distinguishable from each other by machine recognition.” (ECF No. 18-1 at 6:59-61.) It is difficult to see how this claim would stand on its own if the independent claim underlying it is obvious, however. Adding machine recognition to an obvious claim does not render it non-obvious, and Circuit Check does not explain otherwise.¹

Claim 11 is dependent on claim 10 and adds the limitation that “said coating is bonded to said planar plate.” (ECF No. 18-1 at 8:7-8.) Circuit Check explains that the inventor himself testified that bonding to the plate was an important feature of the paint, but QxQ never offered any evidence suggesting that this claim was obvious. Even so, there is no reason to believe that this lone claim would be non-obvious when the rest of the claims are obvious. Merely noting that the coating should bond to the surface is little different than the specification’s instruction that a paint should

¹Circuit Check appears to rely heavily on the premise that it is always the challenger’s burden to overcome the presumption of validity that attaches to patents. But when the foundation, or essence, of an invention has been successfully challenged, it would behoove the patentee to explain, in more than a single paragraph, why a minuscule variant on that invention should be deemed patentable.

adhere well. Accordingly, the fact that QxQ did not specifically address these claims is not fatal to its motion.

III. Conclusion

Circuit Check, perhaps realizing the obviousness of what it actually patented, placed its emphasis on the hard work and ingenuity that went into choosing a kind of paint that would stand up to the drilling and vibrations an alignment plate would experience on a computer-assisted drill. Nothing within this opinion is intended to question the fact that the inventor might indeed have expended significant efforts in selecting a paint. The problem is that choosing paint is not one of the teachings of the patents-in-suit. The claims of the patents merely described the ablation of a surface having a color different from the underlying surface. According to the specification, the surface may have *any* coating (not just paint) so long as it is opaque (“the coating 15 may be a paint, a two-part epoxy, or an other opaque coating . . .) (ECF No. 18-1 at 5:1-2.) The specification does discuss paint, but in doing so it merely instructs that “[A] paint which adheres well . . . should be chosen and tested,” which is a teaching so humdrum as to be meaningless. Importantly, not only do the patents *not* disclose a method or process of selecting paint, they place that onus on the end-user. At trial and during the extensive briefing, the principal non-obvious feature of the invention was the choice of a paint that would adhere to the plastic alignment plates, but because that feature is not one of the teachings of the patents-in-suit, the jury had no basis to conclude that there was anything about the patents that was not obvious. For these reasons, I conclude the jury’s verdict must be set aside.²

²As alluded to earlier, this case turned much more on the legal conclusions to be drawn from the facts, rather than the facts themselves. Accordingly, it makes far more sense to enter judgment as a matter of law rather than order a new trial.

III. Conclusion

For the reasons given above, QxQ's motion for judgment as a matter of law is **GRANTED**.

The Plaintiff's motion to amend the judgment is **DENIED**.

SO ORDERED this 21st day of October, 2014.

/s William C. Griesbach
William C. Griesbach, Chief Judge
United States District Court